



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,305	08/22/2003	Hisasi Goto	1118.68269	9206

7590 02/24/2006

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
300 South Wacker Dr., Suite 2500  
Chicago, IL 60606

EXAMINER

MAHMOOD, REZWANUL

ART UNIT	PAPER NUMBER
----------	--------------

2164

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,305	<b>Applicant(s)</b> GOTO ET AL.	
	<b>Examiner</b> Rezwanul Mahmood	<b>Art Unit</b> 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toub (US Patent 6,674,450) in view of Cohen (US Patent 5,903,898).

3. With respect to claim 1, Toub discloses a method for persisting data manipulations in a transaction processing system that consists of a first computer system issuing a data manipulation request to a database having a plurality of records and a second computer system accessing said database according to said data manipulation request (Toub: Column 5, lines 7-11; Column 4, lines 9-29; Figure 2), said method comprising:

a step where said first computer system designates a search condition, requesting said second computer system to retrieve records that satisfy said search condition from said database; a step where said second computer system retrieves all records that satisfy said search condition designated by said first computer system from said database, sending the contents thereof back to said first computer system (Toub: Column 5, lines 7-11);

a step where said first computer system executes preset data manipulations on a memory to said database object, which corresponds to contents of records retrieved by said second computer system (Toub: Column 5, lines 30-35).

However, Toub does not disclose expressly recording the contents of said data manipulations into said memory as a log by a record;

The Cohen reference, however, discloses storing information changes made to the database by data manipulation as a log file (Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to have added storing data manipulation records as a log file to the method of data manipulation in a transaction processing system.

The suggestion or motivation of doing so would be to store database operations so that the operations can be re-performed to restore the database to its pre-failure state after a failure (Cohen: Column 2, lines 23-28).

Therefore, it would have been obvious to combine Toub with Cohen for the benefit of a method of data manipulation with log records in a transaction processing system.

For the remainder of claim 1, Toub in view of Cohen discloses the following:

a step where said first computer system stores the contents of said database object and said log after the data manipulations into a message, sending the message to the second computer system when all of said preset data manipulations to the

Art Unit: 2164

database object are completed (Toub: Column 5, lines 51-56; Column 11, lines 4-30);  
and

a step where said second computer system accesses said database according to the contents of said log in said message received from said first computer system and the second computer system reflects said database object to said database (Toub: Column 11, lines 4-30).

4. The following claims have the same suggestion or motivation as stated above in the rejection for claim 1.

5. With respect to claim 2, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 1, wherein said first computer system only stores the database object whose contents are updated by said data manipulations and the database object that is added by said data manipulation in said message to send it to the second computer system (Cohen: Column 2, lines 47-57; Toub: Column 5, lines 51-56).

6. With respect to claim 3, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 1, wherein said first computer system stores contents of a database object after the final data manipulation in said message to send it to said second computer system when a

Art Unit: 2164

plurality of data manipulations were executed for said database object (Cohen: Column 2, lines 47-57; Toub: Column 5, lines 51-56).

7. With respect to claim 4, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 3, wherein said first computer system stores contents of only one log, which is needed to reflect said database object stored in said message to said database, in said message when a plurality of data manipulations were executed for said database object (Cohen: Column 2, lines 61-63).

8. With respect to claim 5, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one update log and contents after the final update in said message with respect to a predetermined database object when update was repeated to said database object (Cohen: Column 2, lines 47-52).

9. With respect to claim 6, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one insertion log and contents after the update in a message with respect to a predetermined database object when update was executed after insertion for said database object (Cohen: Column 2, lines 47-52).

Art Unit: 2164

10. With respect to claim 7, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system stores one deletion log in said message and does not store contents with respect to a predetermined database object when deletion was executed after update for said database object (Cohen: Column 2, lines 35-63; Cohen: Column 3, lines 32-35).

11. With respect to claim 8, Toub in view of Cohen discloses the data manipulation persisting method in a transaction processing system according to claim 4, wherein said first computer system does not store a log and contents with respect to a predetermined database object when deletion was executed after insertion for said database object (Cohen: Column 3, lines 32-35; Column 2, lines 35-46).

12. With respect to claim 9, Toub in view of Cohen discloses a data manipulating program for a remote database comprising:

a first step where a client computer, which communicates with a server computer accessing a database to execute transaction for said database, designates a search condition, requesting said server computer to retrieve records that satisfy said search condition from said database (Toub: Column 5, lines 7-11);

a second step where said client computer executes preset data manipulations on a memory to an database object, which corresponds to contents of the records retrieved by said server computer, recording the contents of the data manipulations into said

Art Unit: 2164

memory as a log by a record (Toub: Column 5, lines 30-35; Cohen: Column 5, lines 26-30; Column 6, lines 64-67; Column 7, lines 1-2); and

a third step where said client computer stores the contents of said database object and said log after said data manipulations into a message, sending said message to said server computer, thereby requesting to reflect said database object to said database when all of said preset data manipulations to said database object are completed (Toub: Column 5, lines 51-56; Column 11, lines 4-30).

13. With respect to claim 10, Toub in view of Cohen discloses the data manipulating program for a remote database according to claim 9, wherein modules that make said client computer execute said first and second steps are programmed to vary from one business content to another, and wherein a module that makes said client computer execute said third step is programmed to be common to all business contents (Toub: Column 4, lines 63-67; Column 5, lines 1-56).

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Carlson reference (US Publication 2005/0278316) teaches about data manipulation between first and second computer connected with a database. The Cameron reference (US Publication 2002/0174136) teaches about transaction log files.



***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rezwanul Mahmood whose telephone number is (571)272-5625. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rezwanul Mahmood  
Ph # 571-272-5625



**SAM RIMELL**  
**PRIMARY EXAMINER**